

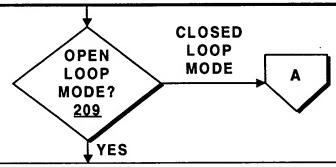
START

SET TARGET SCAN RESOLUTION AND FOCUS-TO-RESOLUTION CURVE, AND POSSIBLY SELECT ALOGORITHMS 201

RECEIVE INFORMATION ABOUT AN OBJECT FROM AN UPSTREAM DEVICE, E.G. HEIGHT, WIDTH, LENGTH, TRANSVERSE POSITION, ROTATION, SCANNED IMAGE 203

GENERATE FOCUS COMMANDS (DYNAMIC FOCUS PROFILE)
FOR AT LEAST ONE DATA COLLECTION DEVICE AS A
FUNCTION OF THE LOCATION OF THE DATA COLLECTION
DEVICE WITH RESPECT TO THE OBJECT 205

RECEIVE INPUT DATA AND ESTABLISH RESCALING ALGORITHM AND QUANTIZING ALGORITHM 207

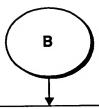


GENERATE A DYNAMIC RESCALING PROFILE AS A FUNCTION OF FOCUS-TO-RESOLUTION CURVE, DYNAMIC FOCUS PROFILE, AND TARGET SCAN RESOLUTION 211

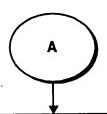
ALIGN THE FIRST DATA POINT OF THE DYNAMIC RESCALING PROFILE AS CLOSELY AS POSSIBLE WITH THE FIRST SCAN LINE OF THE OBJECT IMAGE SURFACE 213

В

FIG. 2A



RECEIVE THE OBJECT IMAGE DATA FROM THE DATA COLLECTION DEVICE INTO THE DATA PROCESSING SUBSYSTEM ON A SCAN LINE BY SCAN LINE BASIS, APPLY RESCALING ALGORITHM AND DYNAMIC RESCALING PROFILE FACTORS TO EACH LINE OF INPUT DATA TO CREATE INTERMEDIATE DATA 215



IMBED A CURRENT FOCUS VALUE IN THE OBJECT IMAGE FOR EACH LINE OF INPUT DATA 217

RECEIVE THE LINE OF INPUT DATA, CALCULATE DYNAMIC RESCALING PROFILE FROM THE CURRENT FOCUS VALUE, APPLY THE DYNAMIC RESCALING PROFILE FACTOR TO THE LINE OF DATA TO CREATE INTERMEDIATE DATA 219

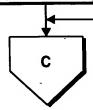


FIG. 2B

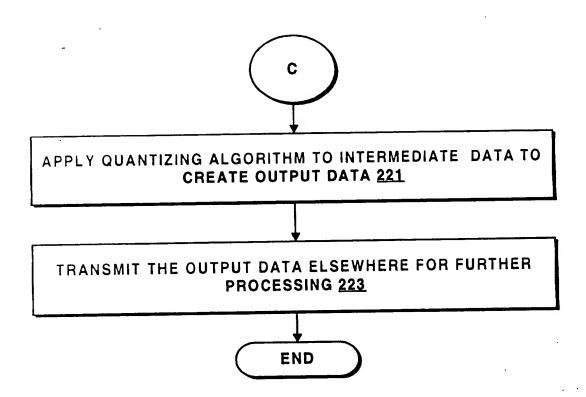
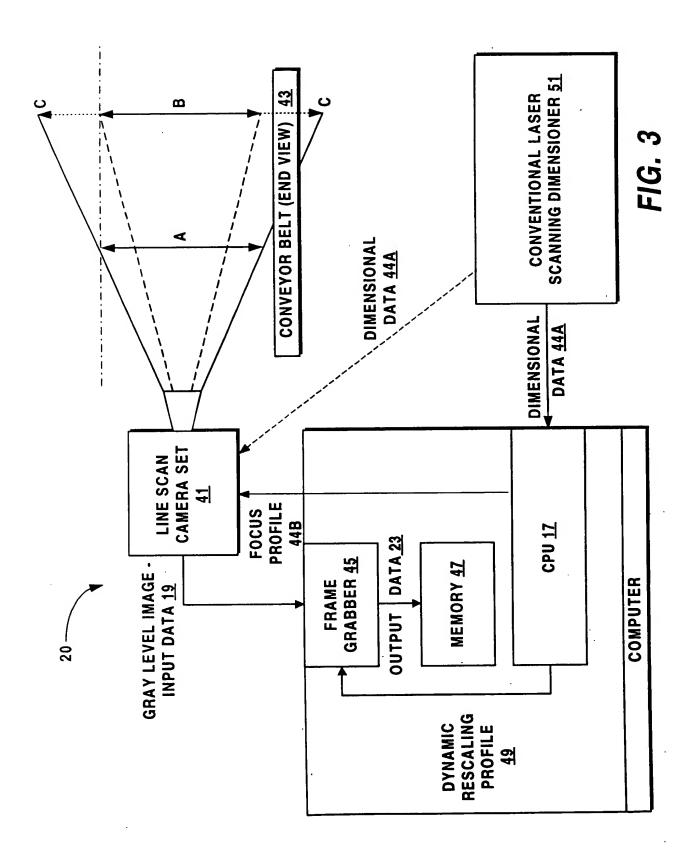
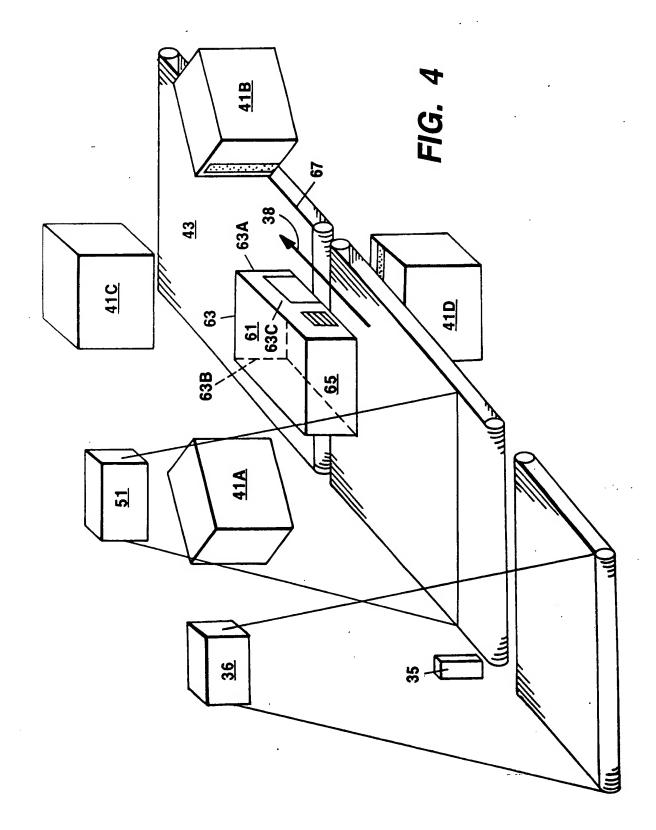


FIG. 2C





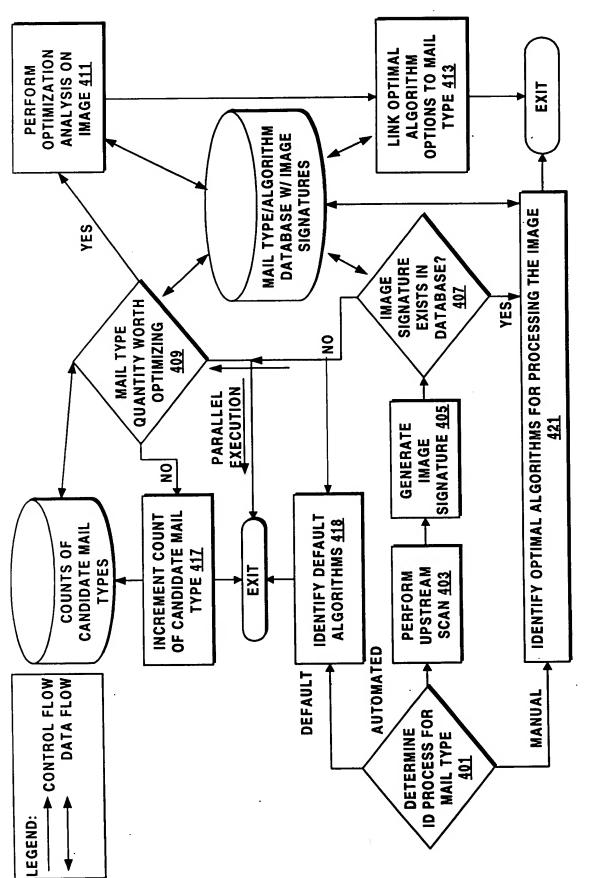


FIG. 5

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FIG. 6B

FIG. 6A PRIOR ART